

Amendments to the Specification:

Please amend the specification as follows:

Amend the paragraph starting on page 7, line 25 to page 8, line 17 as follows:

The present invention provides a technology that, since movement of solid particles capable of absorbing or adsorbing a predetermined gas is restricted by a plurality of heat-transferring fins constituting a heat exchanger disposed in a solid filling tank, the movement of the solid particles filled in the solid filling tank can be prevented from the heat exchanging performance between the solid particles and the heat exchanger to be lowered. The present invention is not simply limited to the technology to provide a restricting portion for restricting the movement of the solid particles to a tank main body of the solid filling tank. The present invention can implement a rational technology to construct a solid filling tank, which is not easily thought of from the conventional technology, having [[a]] heat-transferring fins, which act to transfer and exchange heat, includes a restricting portion for restricting the movement of the solid particles that are filled in the solid filling tank.

Amend the paragraph starting on page 8, line 18 to page 9, line 11 as follows:

A solid filling tank according to a first aspect of the invention has such a structure that a heat exchanger for executing heat exchange with solid particles are disposed in a tank main body in which the solid particles that are capable of absorbing or adsorbing a predetermined gas are filled. The "solid particles" mentioned herein intend[[s]] to include widely the solid particles having a function of absorbing a predetermined gas, such made of various gas absorbing alloy (gas absorbing solid) for absorbing a gas such as hydrogen and nitrogen, the solid particles made of a material having a function of adsorbing a predetermined gas, such as carbon and molecular

sieve (gas adsorbing solid). Therefore, as the solid filling tank of the present invention, a gas absorbing body tank in which gas absorbing solid particles are filled, a gas adsorbing body tank in which gas adsorbing solid particles are filled may be listed. In the present invention, out of various absorbing phenomena, the absorption performed by solid is defined as "absorption".

Amend the paragraph starting on page 10, line 4 to page 12, line 15 as follows:

The restricting portion includes a partitioned portion formed in between each of the opposing pair of the heat-transferring fins. In [[an]]other words, [[T]]the restricting portions partitions spaces (portions) formed in between each opposing pair of the heat-transferring fins. The restricting portion restricts the movement of the solid particles in a subsiding direction. For example, when hydrogen absorbing alloy powders are filled as the solid particles, there is apprehension about the possibility such that the hydrogen absorbing alloy powders expand when absorbing hydrogen and move in the subsiding direction in the solid filling tank. Therefore, as the measure to prevent the subsidence of such hydrogen absorbing alloy powders, the restricting portion is provided. In the present invention, the restricting portion is configured by the heat-transferring fins. More particularly, the structure in which the partitioned portions are formed by arranging alternately [[a]] first heat-transferring fins that are formed in corrugated plate shape and [[a]] second heat-transferring fins that are formed in flat plate shape in parallel to each other. Alternatively, the structure in which the partitioned portions may be formed by arranging a plurality of heat-transferring fins formed in corrugated plate shape in parallel to each other. Further, the structure in which the partitioned portions may be formed by arranging a plurality of heat-transferring fins formed in flat plate shape and each having upright portions thereon in parallel to each other. The restricting portions of the present invention are configured by using a

part or all of a plurality of heat-transferring fins. The "corrugated plate shape" mentioned herein intends to include widely the mode in which a fold-backed portion is formed in an acutely bent manner and the mode in which the corner portion is curved at a predetermined curvature R. As the shape of the heat-transferring fins formed in corrugated plate shape that are obtained by such folding or bending, various modes including not only a triangle shape but also a rectangle (square) shape may be employed. Since the heat-transferring fins for performing the heat exchange with the solid particles include the restricting portion for restricting the subsidence of the solid particles, the movement of the solid particles can be prevented without using a member that has no concern with the heat exchange and not to reduce an amount of filled solid particles and space in which the heat exchanger is provided. As a result, the heat exchanging performance between the solid particles and the heat exchanger can be improved rather than the case where the members having no concern with the heat exchange are disposed in the solid filling tank. Also, it is preferable that the structure should be employed that prevents the reduction in the heat exchanging performance between the heat-transferring fins and the solid particles by reducing areas in which the solid particles are not ~~being-in~~ in contact with the heat-transferring fins. The present invention, when applied to the hydrogen absorbing alloy tank in which the hydrogen absorbing alloy is filled as the solid particles, is effective to prevent the subsiding of the hydrogen absorbing alloy in the solid filling tank and to prevent an excessive stress locally generated due to the expansion of the hydrogen absorbing alloy when the hydrogen absorbing alloy absorbs the hydrogen.

Amend the paragraph starting on page 13, line 18 to page 14, line 13 as follows:

Further in the first and second aspect of the invention, as a third aspect of the invention, it is preferable that a plurality of the heat-transferring fins should be configured by [[a]] first heat-transferring fins formed in a corrugated plate shape and [[a]] second heat-transferring fins formed in a flat plate shape, and that the plurality of partitioned portions are formed between the superposed surfaces by arranging alternately the first heat-transferring fins and the second heat-transferring fins in parallel to each other. The movement of the solid particles, which are filled in the partitioned portions, from the inside of the partitioned portions, which are formed between the heat-transferring fins, to the outside of the partitioned portions is restricted by the cooperation of the first heat-transferring fins and the second heat-transferring fins. In the above described configuration, since the partitioned portions are formed only by arranging alternately the first heat-transferring fins and the second heat-transferring fins in parallel to each other, the structure of the solid filling tank can be simplified.

Amend the paragraph starting on page 31, lines 14 to 21 as follows:

In the embodiment described above, the technology to construct the hydrogen storing tank is set forth. However, the present invention may be applied to the technology to construct various solid ~~filed~~-filled tanks in which the solids that are capable of adsorbing the hydrogen (e.g. carbon, molecular sieve) or the solids that are capable of absorbing or adsorbing a gas other than the hydrogen (e.g. nitrogen) are filled.

Response to Office Action dated November 16, 2005

In the Abstract, please amend as follows:

In a hydrogen storing tank (solid filling tank) in which a hydrogen absorbing alloy (solid) is filled, a heat exchanger for executing heat exchange with the hydrogen absorbing alloy is constructed by laminating alternately [[a]] first heat-transferring fins formed in corrugated plate shape and [[a]] second heat-transferring fins formed in flat plate shape. Partitioned portions that are partitioned by the first heat-transferring fins and the second heat-transferring fins restrict movement of hydrogen absorbing alloy powders (MH powders) in a subsiding direction. Therefore, movement of the MH powders can surely be prevented by not using members that has no concern with the heat exchange and reduces an amount of filled MH powders and a volume in which the heat exchanger is provided.